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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,368	02/05/2004	Naoki Yamaguchi	FUJH 20.915	9533

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EXAMINER	
LEUNG, WAI LUN	
ART UNIT	**PAPER NUMBER**
2613	
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08/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/773,368	YAMAGUCHI ET AL.	
	Examiner	Art Unit	
	Wai Lun Leung	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by **Isonuma et al.** *(US20010046207).*

Regarding to claim 10, **Isonuma** discloses a bidirectional line switched ring network (BLSR) *(paragraph 16)* comprising: two bidirectional line switched ring networks each comprising a plurality of optical transmission equipments sets connected in a ring form *(fig 29, including BLSR ring 1 and BLSR ring 2 both with bidirectional EAST and WEST directions),* being interconnected with lower-order channels including a work channel *(fig 29 via primary node)* and a protection channel *(fig 29 via secondary nodes)* , wherein, in regard to two nodes provided in each of the two bidirectional line switched ring networks, one node being connected to the lower-order work channel *(fig 29 primary nodes in between multiple ring provide work channels)* while the other node being connected to the lower-order protection channel *(fig 29 secondary nodes in between multiple rings provide protection channels)* , as an expected source node ID to be transmitted from a source node to the lower-order work channel, either an ID or a

source node transmitted to the own node, or an ID of a source node transmitting to the node connected to the lower-order protection channel, is set *(paragraph 24-28 "compare the far-end node ID with the node Ids that have been set").*

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Furthermore, the key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.* note that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn* 441 F.3d977,988,738 USPQ2d1329,1336(Fed.Cir.2006) stated that "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shioda et al.** *(US005537393A)*, in view of **Spires et al.** *(US 2002018671 9A1)*.

Regarding claim 1, **Shioda** discloses a bidirectional line switched ring network comprising:

a plurality of optical transmission equipment sets connected in a ring form *(fig 1, node A-D)*, wherein optical transmission equipment provided in a node on the transmission side performs transmission to each lower-order channel *(fig 3)* by attaching a transmission-side node ID *(col 2, ln 5-20)*, and,

optical transmission equipment provided in a node on the reception side *(fig 1, nodes A-D)* collates the received transmission-side node ID with an expected value of the transmission-side node ID *(col 2, ln 12-20)* having been set in advance, and when the collation does not match, the optical transmission equipment in the node on the reception side prevents a misconnection in the event of a failure by inserting an alarm indication signal *(col 2, ln 15-21)*. **Shioda** further teaches wherein the time slot interchange (TSI) of a channel may be enabled in a pass-through node *(col 9, ln 1-14)*. **Shioda** does not disclose expressly the transmission-side node ID is transmitted using a V3 byte, and wherein, using the V3 bytes for three frames, the transmission-side node ID and a channel ID are additionally transmitted to each VT channel. **Spires**, from the same field of endeavor, teaches a framing technique to be used on an optical

network, where a transmission-side node ID is transmitted using a V3 byte *(paragraphs 40-41)*, wherein using the V3 bytes for three frames, the transmission-side node ID and a channel ID are additionally transmitted to each VT channel, so that the time slot interchange (TSI) of the VT channel is enabled in a pass-through node *(paragraphs 2-3)*. Therefore, it would have been obvious for a person of ordinary skill in the art at the time of invention to implement the data transmission from the V3 byte to transport the node ID information in **Shioda**'s system as suggested by **Spires**.

Furthermore, it would have been obvious for a person of ordinary skill in the art at the time of invention to recognized that applying a known technique such as that of **Spires's** onto **Shioda's** base device /system upon which the claimed invention can be seen as an "improvement" would have yielded predictable results and resulted in an improvement system, since **Spires's** teaching is capable of enhancing performance of an optical network by using bytes V1-V4 so as to reduce interface complexity with maximum efficiency of the network elements.

Therefore, the rationale of applying a known technique (**Spires's**) to a known device /system (**Shioda's**) ready for improvement to yield predictable results has been clearly articulated herein with the *Graham* inquiries and findings as presented above. In *Dann v. Johnston* 525 U.S. 219, 189 USPQ257 (1976) The Court held that "[t]he gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonable skilled in the art."

As to claim 7, **Shioda** teaches a bidirectional line switched ring network comprising:

a plurality of optical transmission equipment sets connected in a ring form *(fig 1, node A-D)*,

wherein optical transmission equipment provided in a node on the transmission side performs transmission to each higher-order channel *(fig 7)* by attaching a transmission-side node ID, *(col 2, ln 5-20)*, and,

optical transmission equipment provided in a node *(fig 1, nodes A-D)* on the reception side collates the received transmission-side node ID with an expected value of the transmission-side node ID *(col 2, ln 12-20)* having been set in advance, and when the collation does not match, the optical transmission equipment in the node on the reception side prevents a misconnection in the event of a failure by inserting an alarm indication signal *(col 2, ln 15-21)*. **Shioda** further teaches wherein the time slot interchange (TSI) of a channel may be enabled in a pass-through node *(col 9, ln 1-14)*. **Shioda** does not disclose expressly wherein the node ID is transmitted using a H3 byte, or wherein, using the H3 bytes for three frames, the transmission-side node ID and a channel ID are additionally transmitted to each STS channel. **Spires**, from the same field of endeavor, teaches a framing technique to be used on an optical network, where a transmission-side node ID is transmitted using a H3 byte *(paragraph 46)*, wherein using the H3 bytes for three frames, the transmission-side node ID and a channel ID are additionally transmitted to each STS channel, so that the time slot interchange (TSI) of the STS channel is enabled in a pass-through node *(paragraphs 2-3)*. Therefore, it would have been obvious for a person of ordinary skill in the art at the time of invention to implement the data transmission form the H3 byte to transport the node ID information in **Shioda**'s system as suggested by **Spires** for the same reasons as stated above regarding claim 1.

Regarding claim 3, **the combination of Shioda and Spires** discloses the bidirectional line switched ring network in accordance to claim 1 as discussed above. **It** does not disclose expressly wherein functions of inserting the transmission-side node ID into the V3 byte, collating with the expected value, and squelching can be set ineffective. However, as stated in the previous action, official notice is taken in that it would have been obvious to one of ordinary skill in the art at the time of invention that such limitation of turning a feature on or off is common and well known; implementation of a switch, sensor, threshold, command, program or other well known in feature that would enable the combination of Shioda and Spire's system on or off is obvious to a person of ordinary skill in the art, upon which the claimed invention can be seen as an "improvement" would have yielded predictable results and resulted in an improvement system. Applicant's failure to adequately traverse the examiner's taking of Official Notice in the last Office action is hereby taken as an admission of fact(s) notices.

Therefore, the rationale of applying a known technique to a known system ready for improvement to yield predictable results has been clearly articulated herein with the *Graham* inquiries and findings as presented above. In *Dann v. Johnston* 525 U.S. 219, 189 USPQ257 (1976) The Court held that "[t]he gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonable skilled in the art."

Regarding claim 5, **Shioda** further teaches wherein, using the first to sixth bits of a H4 byte, the time slot interchange (TSI) is enabled in the pass-through node *(col 9, ln 1-14)*.

Regarding claim 6 **Spires** further teaches wherein the transmission-side node ID is transmitted using a V4 byte, in place of the V3 byte *(paragraph 7)*.

Response to Arguments

7. Applicant's arguments filed 7/11/2007 have been fully considered but they are not persuasive.

8. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., addition of an ID at and transmitted from an ADD-side note is received and compared with an expected value at a Drop-side node" for claim 10; "a VT Path Squelch operation" for claims 1 and 7) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

9. The prior art made of record in previous action(s) and not relied upon is considered pertinent to applicant's disclosure.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wai Lun Leung whose telephone number is (571) 272-5504. The examiner can normally be reached on 11:30am-9:00pm Mon-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DWL
8/14/2007

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